

PATENT**D0932-00383
[I-8766]****IV. Remarks****A. Amendments to the Specification**

Paragraph 4 has been amended to correct "flights 24" to be "flights 16" consistent with the remainder of the disclosure.

B. Claim Rejection under 35 U.S.C. §112

The Action rejects Claims 2 and 32 under §112, ¶¶ 1 and 2 as failing to comply with the written description requirement and as being indefinite. Specifically, the Examiner objects to the use of the claim term "nip zone" because it is not used in the specification.

Applicants believe the Examiner meant to reject Claim 30s and 31, which recite the term "nip zone," as Claims 2 and 32 are not pending in the present application.

Taking Claim 30 as exemplary, Claim 30 depends from Claim 3, which recites that the conveyor system of Claim 1 includes rotating conveyors cooperating to move said insulation mat both horizontally and vertically through said curing oven tower in a serpentine path. Claim 30 recites that "a portion of said rotating conveyors cooperate to move said insulation mat vertically forms a nip zone" with "a portion of said rotating conveyors cooperating to move said insulation horizontally." The recited nip zone includes at least one inclined belt for receiving said insulation mat.

Applicants submit that this claim limitation is sufficiently definite in view of the description of the invention provided by both the Specification and the Drawings. Further, Applicants are aware of no obligation set forth in the patent statute, the Patent Office rules or guidance from the MPEP requiring Applicants to use the terminology of the claims word-for-word in the description. It is submitted that given the description, one of ordinary skill would understand what is meant by "nip zone." Applicants believe that "nip" is commonly understood to mean "to take hold of or to squeeze." Claim 30 defines that the "nip zone" is formed from (i) a portion of the rotating conveyors cooperating to move the insulation mat vertically and (ii) a

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portion of the rotating conveyors cooperating to move the insulation horizontally. This "nip zone" formed by the two recited horizontal and vertical "portions" can clearly be seen from FIG. 3 where, for example, horizontal conveyor sections 103a/103b meet with vertical conveyor section 103j to hold the insulation mat and move it vertically.

If not yet sufficiently definite, Claim 30 continues and recites "said nip zone including at least one inclined belt for receiving said insulation mat." The "inclined belt" portion of the "nip zone" can be seen at, for example, the inclined belt of section 130j.

For at least these reasons, it is submitted that Claims 30 and 31 are sufficiently definite and enabled. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

C. Claim Amendments

Claims 30 and 31 have been amended to correct apparent typographical errors.

D. New Claims

New Claims 32-35 have been added, examination of which is requested. Support for the new claims can be found at, for example, Paragraph 4 of the application.

E. Rejection under 35 U.S.C. §102**1. Claims 1, 3-4, 16 and 21**

The Action rejects Claims 1, 3-4, 16 and 21 as being anticipated by U.S. Patent No. 2,830,648 to Haddox. Reconsideration and withdrawal of this rejection are requested in view of the following arguments.

Independent Claim 1 is directed to an insulation manufacturing system having a curing oven for heating an uncured or partially cured insulation mat. The curing oven tower has a plurality of vertical oven zones and a conveyor system. The conveyor system has a plurality of

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pairs of counter-rotating conveyors disposed to move the insulation mat through the vertical oven zones, where the insulation mat is disposed between said counter-rotating conveyors.

In rejecting Claim 1, the Examiner cites to oven 40 of Haddox and concludes that the oven includes vertical oven zones 39 and 31 and a conveyor system 26 for moving the insulation mat through the vertical oven zones.

Element 31 of the system of Haddox is a vacuum chamber connected to vacuum pump 34 that attracts the fibers 20 to the surface of the belt and retains the fibers against the belt to build up the mat 37. (Col. 2, Lines 24-32). It is by no means a vertical oven zone with a heat source.

Further, as clearly shown in FIG. 1, within oven 40, conveyor 27 only moves the mat 37 in a horizontal direction between upper and lower oven section 38 and 39. (See FIG. 1; Col. 2, Lines 58-73).

For at least these reasons, it is submitted that Haddox does not teach a curing oven tower comprising a plurality of vertical oven zones comprising heat sources, and a conveyor system comprising a plurality of pairs of counter-rotating conveyors disposed to move said mat through said plurality of vertical oven zones for curing as claimed in Claim 1 and dependent Claims 3 and 4.

Claim 16 recites that the conveyor system comprises cooperable pairs of counter rotating conveyors arranged for moving the insulation mat both vertically and horizontally through the curing oven tower in a serpentine path. Per the discussion of Haddox above, Haddox's system clearly only conveys the mat 37 horizontally through the oven 40. For at least this reason, it is submitted that Haddox does not teach the recited conveyor system and oven tower of Claim 16 and dependent Claim 21.

For at least the reasons set forth above, it is submitted that Claims 1, 3-4, 16 and 21 are not anticipated by Haddox and are allowable over the cited reference.

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2. Claims 8, 10-15 and 22-29

The Action rejects Claims 8, 10-15 and 22-29 as being anticipated by U.S. Patent No. 2,467,291 to Brelsford et al. ("Brelsford"). Reconsideration and withdrawal of this rejection are requested in view of the following arguments.

Claim 8 is directed to a method of curing insulation comprising moving an uncured or partially cured insulation mat through a curing oven tower comprising a plurality of vertical oven zones. As described below, Brelsford clearly does not teach the plurality of "vertical oven zones" nor moving an insulation mat through a plurality of vertical oven zones.

FIG. 1 shows the curing oven 74 of the system of Brelsford. The curing oven is best shown in the side view of FIG. 6 and end view of FIG. 7. The system of Brelsford includes a lower conveyor 81 and an upper conveyor 82. The positioning of the upper and lower conveyors 81, 82 determine the thickness of the mat. (Col. 8, Lines 41-48). As shown in FIGS. 6 and 7, each conveyor 81, 82 rotates to move the mat through the curing oven. The mat can be seen in FIG. 7 between the conveyors and the burners 98. As is clearly shown in these figures, the mat is conveyed in only the horizontal direction and through oven zones that are along the same horizontal plane. In essence, a single heating zone is formed between the burners 98. It should be clear from these figures, therefore, that Brelsford does not teach the curing oven tower comprising a plurality of vertical oven zones as claimed in Claim 8 and dependent Claims 10-15.

Claim 22 is also directed to a method of curing insulation and comprises the step of moving the uncured or partially cured mat both horizontally and vertically in a serpentine path through a curing oven tower comprising a heat source. Clearly, as seen in FIGS. 6 and 7 of Brelsford, Brelsford's conveyors 81 and 82 cooperate to move the insulation mat in a purely horizontal direction, which is in no way "horizontally and vertically in a serpentine path." It is submitted, therefore, that Claim 22 and dependent Claims 23-29 are not anticipated by and are allowable over the cited reference.

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The Action rejects Claims 7 and 20 as being obvious from Haddox in view of U.S. Patent No. 3,413,731 to Fleissner.

The Action also rejects Claim 30 as being obvious from Haddox in view of U.S. Patent No. 6,357,504 to Patel et al. ("Patel").

The Action also rejects Claim 31 as being obvious from Brelsford in view of Patel.

Claims 7 and 20 depend from Claim 1 and 16, respectively. Claim 30 depends from Claim 3, and Claim 31 depends from Claim 22. It is submitted that Claims 7, 20, 30 and 31 are allowable for at least the reasons set forth above in connection with Claims 1, 16, 3 and 22, respectively. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

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V. Conclusion

In view of the foregoing remarks and amendments, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

Dated: 1-17-06


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